

# Exhibit G

PATENT  
ATTORNEY DOCKET NO.: 056100-5038

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:	)	
	)	
Chiu-shiueYan et al.	)	Confirmation No.: not yet assigned
	)	
Application No.: not yet assigned	)	Group Art Unit: not yet assigned
	)	
Filed: July 13, 2004	)	Examiner: not yet assigned
	)	
For: ANNEALING SINGLE CRYSTAL	)	
CHEMICAL VAPOR DEPOSITION	)	
DIAMONDS	)	

Commissioner for Patents  
U.S. Patent and Trademark Office  
220 20th Street S.  
**Customer Window**  
Crystal Plaza Two, Lobby, Room 1B03  
Arlington, VA 22202

**DECLARATION UNDER 37 C.F.R. 1.132**

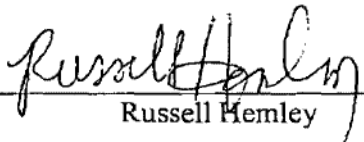
1. The undersigned are Russell Hemley who is a Senior Staff Scientist at the Carnegie Institution of Washington, Ho-Kwang (Dave) Mao who is Senior Staff Scientist at the Carnegie Institution of Washington and Chih-Shiue Yan who is a Research Scientist at the Carnegie Institution of Washington (hereinafter "Carnegie").
2. Dr. Wei Li is a former colleague who worked with Russell Hemley and Dave Mao at Carnegie on High Pressure High Temperature (hereinafter "HPHT") diamond synthesis from March 1996 to January 1998.
3. Dr. Li went to work for the national laboratories in Los Alamos, New Mexico after leaving Carnegie.
4. By May 2002, Carnegie had produced over 50 single crystal diamonds via microwave plasma CVD. Dr. Wei Li had nothing to do with the production of these diamonds. By this time, we

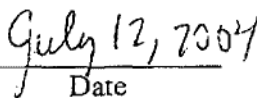
had already determined that the single crystal CVD diamonds had discolorations and defects, which might be reduced by HPHT annealing in view of previous literature, such as by I. M. Reinitz et al. *Gems & Gemology* 36, 128-137 (2000). Further, we believed that other physical properties of the single crystal CVD diamonds could be enhanced by HPHT annealing.

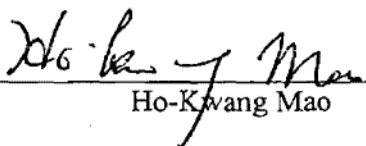
5. In April 2002, we contacted Dr. Li to request that he perform HPHT annealing processes on the single crystal CVD diamonds that were produced at Carnegie because we knew that he had the equipment necessary to perform HPHT annealing. At that time, Dr. Li was working at Phoenix Crystal Corporation. It is not uncommon in the scientific community to request tests or further processings from other people in the interest of obtaining corroborating results. We sent three single crystal CVD diamonds to Dr. Li so that he could perform HPHT annealing on the single crystal CVD diamonds. In accordance with our directions, Dr. Li performed HPHT annealing on our single crystal CVD diamonds. These diamonds were returned about a week later. The color enhancement was not readily apparent because of a heavy yellow tint in the seed diamonds and a larger sampling of different single crystal CVD diamonds was also deemed necessary.
6. In May 2002, we sent eight single crystal CVD diamonds to Dr. Li. We directed him to anneal these single crystal CVD diamonds at higher temperatures. Dr. Li was in constant contact with us during the HPHT annealing of these single crystal CVD diamonds. All of the HPHT annealing processes done on Carnegie's single CVD diamonds were done at our direction. Dr. Li did not return the samples for about three months. Dr. Li explained that he had sent the samples to companies and friends for evaluation. However, Dr. Li refused to tell us where he sent our diamonds.
7. In August 2002, we received the HPHT annealed single crystal diamonds from Dr. Li and sent them to Los Alamo National Laboratory for tests. We received the results of the tests by May 2003. Subsequently, a paper was written entitled "Ultrahard single-crystal diamond from chemical vapor deposition" regarding the results of the test done at the Los Alamo National Laboratory. Dr. Li was listed on this paper in gratitude for performing the HPHT annealing on the single crystal CVD diamonds. We filed the paper as a provisional U.S. patent application on July 14, 2003. Subsequently, the paper was published in February, 2004.

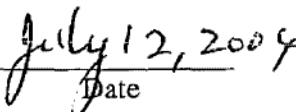
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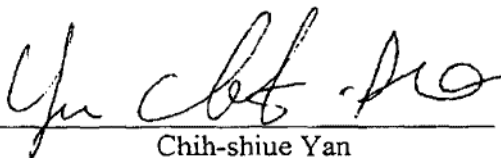
8. We have read U.S. Patent Application Publication 2003/0230232 of U.S. patent application serial number 10/161,266. We believe the single crystal CVD diamond mentioned in U.S. Patent Application Publication 2003/0230232 to be one of the diamonds provide to Dr. Li by us because of the description of the diamond at paragraph [0020] in the publication. Further, we know of no other source that could provide Dr. Li with such diamonds. We believe that the HPHT annealing processes discussed in U.S. Patent Application Publication 2003/0230232 are processes we directed Dr. Li to carry out because they are similar to the HPHT processes that we asked Dr. Li to perform. Dr. Li never informed us that he filed the U.S. patent application serial number 10/161,266 even though we had extensive contact with Dr. Li prior to and after the filing of this U.S. patent application. We have no pertinent knowledge of Robert H. Frushour who is listed as an inventor in U.S. Patent Application Publication 2003/0230232.
9. We further declare that all statements made herein of our own knowledge are true, and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the above-referenced patent.

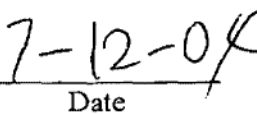
  
Russell Hemley

  
Date

  
Ho-Kwang Mao

  
Date

  
Chih-shiue Yan

  
Date